IN THE CLAIMS

Claim 1-18 (canceled)

Claim 19.(previously amended and currently amended)

A device produced according to the method of making a silicon micromechanical structure, comprising the steps of:

forming a lightly doped silicon substrate having a first and second side and having less than $5x10^{19}$ cm^{-3} boron therein;

placing a p+ layer on the first side of said substrate, said p+ having a boron content of greater than $7x10^{19}$ cm^{-3} to provide a stain compensated p+ layer and a doping germanium content of no more than about $1x10^{21}$ cm^{-3} to form a low germanium doped etch stop;

forming a mask on the second side for etching a predetermined pattern;

etching said second side to said p+ layer; and

depositing an insulator on said p+ layer and fabricating an electronic component on said insulator.

Claim 20. (previously presented)

The device of claim 19, wherein said boron content is greater than $1x10^{20}$ cm^{-3} and the germanium content is from about $O.5\ x10^{21}$ cm^{-3} to about $2.0\ x10^{21}$ cm^{-3} .

Claim 21. (previously presented)

The device of claim 19, wherein said micromechanical structure is a pressure sensor.

Claim 22. (previously presented)

The device of claim 21, wherein said electronic component is selected from the group consisting of dielectrically isolated piezoresistors and resonant microbeams.

Claim 23. (previously presented)

The device of claim 19, wherein said micromechanical structure is a cantilevered accelerometer.

Claim 24. (previously presented)

The device of claim 23, wherein said electronic component is selected from the group consisting of dielectrically isolated piezoresistors and resonant microbeams.

Claim 25. (previously presented)

The device of claim 19, wherein said micromechanical structure is a dual web biplane accelerometer formed by forming a said p+ layer on both sides of said substrate, forming a proof mask and flexure etching on both sides of said layer until said etching reaches said p+ layers.

Claim 26. (previously presented)

The device of claim 25, wherein said electronic component is selected from the group consisting of dielectrically isolated piezoresistors and resonant microbeams.

Claim 27. (previously presented)

The device of claim 19, wherein said micromechanical structure includes a dielectrically isolated piezoresistor formed on a top surface of a first wafer, a second wafer is bonded to said first wafer, and said second wafer forms a single crystal piezoresistor.

Claim 28.(previously amended and currently amended)

A device produced according to the method of making a silicon micromechanical structure, comprising the steps of:

forming a lightly doped silicon substrate having a first and second side and having less than $5x10^{19}$ cm^{-3} boron therein;

placing a p+ layer on the first side of said substrate, said p+ having a boron content of greater than $7x10^{19}$ cm^{-3} to produce a strain compensated p+ layer and a doping germanium content of no more than about $1x10^{21}$ cm^{-3} to form a low germanium doped etch stop;

forming a lightly doped layer on said p+ layer to form a buried p+ layer;

forming a mask on the second side for etching a predetermined pattern;

etching said second side to said buried p+ layer; and

depositing an insulator on said lightly doped layer and fabricating an electronic component on said insulator.

Claim 29. (previously presented)

The device of claim 28, wherein said boron content is greater than $1x10^{20}$ cm^{-3} and the germanium content is from about $O.5\ x10^{21}$ cm^{-3} to about $2.0\ x10^{21}$ cm^{-3}

Claim 30. (previously presented)

The device of claim 28, wherein said micromechanical structure is a pressure sensor.

Claim 31. (previously presented)

The device of claim 30, wherein said electronic component is selected from the group consisting of dielectrically isolated piezoresistors and resonant microbeams.

Claim 32. (previously presented)

The device of claim 28, wherein said micromechanical structure is a cantilevered accelerometer.

Claim 33. (previously presented)

The device of claim 32, wherein said electronic component is selected from the group consisting of dielectrically isolated piezoresistors and resonant microbeams.

Claim 34. (previously presented)

The device of claim 28, wherein said micromechanical structure is a dual web biplane accelerometer formed by forming a said p+ layer on both sides of said substrate, forming a proof mask and flexure etching on both sides of said layer until said etching reaches said p+ layers.

Claim 35. (previously presented)

The device of claim 34, wherein said electronic component is selected from the group consisting of dielectrically isolated piezoresistors and resonant microbeams.

Claim 36. (previously presented)

The device of claim 28, wherein said micromechanical structure includes a dielectrically isolated piezoresistor formed on a top surface of a first wafer, a second wafer is bonded to said first wafer, and said second wafer forms a single crystal piezoresistor.